

**METRIC**

**A-A-20087C**

**April 28, 2006**

**SUPERSEDING**

**A-A-20087B**

**September 22, 2000**

## **COMMERCIAL ITEM DESCRIPTION**

### **SOY SAUCE**

**The U.S. Department of Agriculture (USDA) has authorized the use of this Commercial Item Description (CID).**

**1. SCOPE.** This CID covers soy sauce packed in commercially acceptable containers, suitable for use by Federal, State, local governments, and other interested parties; and as a component of operational rations.

#### **2. PURCHASER NOTES.**

##### **2.1 Purchasers *shall specify* the following:**

- Type(s) of soy sauce required (Sec. 3).
- When analytical requirements are different than specified (Sec. 6.1).
- When analytical requirements need to be verified (Sec. 6.2).
- Manufacturer's/distributor's certification (Sec. 9.2) or USDA certification (Sec. 9.3).

##### **2.2 Purchasers *may specify* the following:**

- Manufacturer's quality assurance (Sec. 9.1 with 9.1.1) or (Sec. 9.1 with 9.1.2).
- Packaging requirements other than commercial (Sec. 10).

**3. CLASSIFICATION.** The soy sauce shall conform to the following list which shall be specified in the solicitation, contract, or purchase order.

#### **Types.**

**Type I** - Fermented

**Type II** - Non-fermented

**Type III** - Low sodium (Lite) (21 CFR § 101.56)

**4. MANUFACTURER'S/DISTRIBUTOR'S NOTES. Manufacturer's/distributor's products *shall meet the requirements of the:***

- Salient characteristics (Sec. 5).
- Analytical requirements: *as specified by the purchaser* (Sec. 6).
- Manufacturer's/distributor's product assurance (Sec. 7).
- Regulatory requirements (Sec. 8).
- Quality assurance provisions: *as specified by the purchaser* (Sec. 9).
- Packaging requirements other than commercial: *as specified by the purchaser* (Sec. 10).

**5. SALIENT CHARACTERISTICS.**

**5.1 Processing.** The soy sauce shall be processed in accordance with good manufacturing practices (21 CFR Part 110).

**5.1.1 Type I - Fermented.** The fermented soy sauce shall be produced from the fermentation of soybeans or defatted soybeans with fermented mash together with salt brine and with or without preservatives, such as benzoic acid or sodium benzoate. The fermented mash is derived from enzymatic digestion of Koji with salt brine and from fermentation by yeast and lactic acid bacteria. Koji shall be a mixture of wheat and soybeans or defatted soybeans cultured with the mold, *Aspergillus oryzae* or *Aspergillus soyae*.

**5.1.2 Type II - Non-fermented.** The non-fermented soy sauce shall be a blend of hydrolyzed vegetable protein, salt, corn syrup or sugar, caramel color, and water. The non-fermented soy sauce may contain wheat, vinegar and/or organic acids (such as acetic or citric acid), and preservatives.

**5.1.3 Type III - Low sodium (Lite).** The low sodium soy sauce shall be either fermented or non-fermented, reduced by 50 percent or more in sodium content per serving size when compared to the reference food as defined by 21 CFR § 101.56.

**5.2 Flavor.** The Type I and Type II soy sauce shall have a well-blended, palatable, tart, and salty flavor. The Type III soy sauce shall have a well-blended, palatable, tart, and slightly salty flavor.

**5.3 Color and appearance.** Type I soy sauce shall be a clear reddish-brown liquid. Type II soy sauce shall be a clear dark-brown liquid. Type III soy sauce shall be a reddish-brown or dark brown liquid. All types shall be practically free of sediment.

**5.4 Foreign material.** All ingredients and finished product shall be clean, sound, wholesome, and free from evidence of rodent or insect infestation.

## 6. ANALYTICAL REQUIREMENTS.

**6.1 Analytical requirements.** Unless otherwise specified in the solicitation, contract, or purchase order, the analytical requirements for the soy sauce shall be as follows:

**TABLE I. Analytical requirements** (percent by weight)

	<b>Type I Fermented</b>	<b>Type II Non-Fermented</b>	<b>Type III Low Sodium (Lite)</b>
<b>Titrateable acidity (as acetic)</b>	.90 - 1.35	0.8 - 1.6	1.2 - 2.0
<b>Total salt (as NaCl)</b>	13.5 - 16.0	13.0 - 21.0	8.0 - 13.0
<b>pH (value)</b>	4.5 - 5.2	4.5 - 6.0	4.2 - 5.0
<b>Protein (Nx6.25) (NLT) <u>1/</u></b>	7.5	4.5	3.9
<b>Invert sugar (NMT) <u>2/</u></b>	---	10.0	---
<b>Alcohol</b>	1.0 - 3.5	---	---
<b>Total solids (NLT) <u>1/</u> (Vacuum oven)</b>	28.0	32.0	23.0
<b>Sodium (NMT) <u>2/</u></b>	---	---	140 mg per serving
<b>Water activity (<math>a_w</math>) (NMT) (value) <u>2/</u></b>	---	---	0.85 <u>3/</u>

1/ NLT = Not Less Than

2/ NMT = Not More Than

3/ An  $a_w$  not more than 0.85 is required when the salt level is less than 10.0 percent, or the product has not been hot filled at a minimum temperature of 85°C (185°F).

**6.2 Product verification.** When USDA verification of analytical requirements is specified in the solicitation, contract, or purchase order, the following procedures will be followed.

## A-A-20087C

**6.2.1 Sampling procedures.** USDA inspection service will select the number of product containers based on USDA inspection service sampling procedures and plans.

**6.2.2 Composite sample.** Analytical testing shall be performed on a composite sample. The composite sample shall be 454 g (1 lb) and prepared from subsamples drawn from randomly selected containers. The number of subsamples used to create the composite shall be based on USDA procedures.

**6.3 Analytical testing.** When specified in the solicitation, contract, or purchase order, the analyses shall be made in accordance with the following methods from the Official Methods of Analysis of the AOAC International:

<u>Test</u>	<u>Method</u>
Titrateable acidity (as acetic)	942.15
Total salt	971.27
pH	981.12
Protein	988.05 or 992.15
Invert sugar	923.09 or 906.03
Alcohol	950.04 or 942.06
Total solids	990.20
Sodium	966.16
a <sub>w</sub>	978.18

**6.4 Test results.** The test results for salt, protein, invert sugar, alcohol, and total solids shall be reported to the nearest 0.1 percent. Titrateable acidity for Type I shall be reported to the nearest 0.01 percent and 0.1 percent for Type II and Type III. The test result for sodium shall be reported to the nearest milligram per serving. The test result for a<sub>w</sub> (Type III) shall be reported to the nearest 0.01 value. The test result for the pH shall be reported to the nearest 0.1 value. Any result not conforming to the analytical requirements shall be cause for rejection of the lot.

**7. MANUFACTURER'S/DISTRIBUTOR'S PRODUCT ASSURANCE.** The manufacturer/distributor shall certify that the soy sauce provided shall meet the salient characteristics of this CID, conform to their own specifications, standards, and quality assurance practices, and be the same soy sauce offered for sale in the commercial market. The purchaser reserves the right to require proof of conformance.

**8. REGULATORY REQUIREMENTS.** The delivered soy sauce shall comply with all applicable Federal, State, and local mandatory requirements and regulations relating to the preparation, packaging, labeling, storage, distribution, and sale of soy sauce within the commercial marketplace. Delivered soy sauce shall comply with all applicable provisions of the

Federal Food, Drug, and Cosmetic Act, the Fair Packaging and Labeling Act, and regulations promulgated thereunder.

**9. QUALITY ASSURANCE PROVISIONS.** *Purchaser shall specify 9.2 or 9.3; purchaser may specify 9.1 with 9.1.1 or 9.1 with 9.1.2.*

**9.1 Manufacturer's quality assurance.** When required in the solicitation, contract, or purchase order, the product manufacturer shall be required to provide evidence, by certificate, that the manufacturing plant has undertaken one of the following quality assurance measures within 12 months prior to providing a bid, or no later than 10 business days from the date of awarding of the contract. Failure to provide this documentation within the proper time frame may result in the contract being terminated for cause.

**9.1.1 Plant systems audit.** A plant systems audit (PSA) conducted by USDA, Agricultural Marketing Service (AMS), or another audit performed by a third party auditing service and is required within 12 months prior to the date of the awarding of the contract. *(An AMS PSA verifies the manufacturer's capability to produce products in a clean, sanitary environment in accordance with Title 21 Code of Federal Regulations Part 110 - Current Good Manufacturing Practice in Manufacturing, Packing, or Holding Human Food, and verifies that the manufacturer has in place an internal quality assurance program. The AMS PSA determines the manufacturer's ability to produce under this CID, if the products of interest are identified at the time of the PSA.)*

**9.1.2 Plant survey.** A plant survey conducted by USDA, AMS, or another survey performed by a third party auditing service is required within 12 months prior to the date of the awarding of the contract. *(An AMS plant survey audit verifies that, at the time of the survey, the manufacturer produces products in a clean, sanitary environment in accordance with Title 21 Code of Federal Regulations Part 110 - Current Good Manufacturing Practice in Manufacturing, Packing, or Holding Human Food.)*

**9.2 Manufacturer's/distributor's certification.** When required in the solicitation, contract, or purchase order, the manufacturer/distributor will certify that the finished soy sauce distributed meets or exceeds the requirements of this CID.

**9.3 USDA certification.** When required in the solicitation, contract, or purchase order that product quality or acceptability or both be determined, the Processed Products Branch (PPB), Fruit and Vegetable Programs (FVP), AMS, USDA shall be the certifying program. PPB inspectors shall certify the quality and acceptability of the soy sauce in accordance with PPB procedures which include selecting random samples of the soy sauce, evaluating the samples for conformance with the salient characteristics of this CID and other contractual requirements, and documenting the findings on official PPB score sheets and/or certificates. In addition, when required in the solicitation, contract, or purchase order, PPB inspectors will examine the soy sauce for conformance to the United States Standards of Condition of Food Containers in effect

## **A-A-20087C**

on the date of the solicitation.

**10. PACKAGING.** Preservation, packaging, packing, labeling, and case marking shall be commercial unless otherwise specified in the solicitation, contract, or purchase order.

**11. USDA INSPECTION NOTES.** When Section 9.3 is specified in the solicitation, contract, or purchase order, USDA certification shall include evaluation of the quality and condition of samples of packaged soy sauce, and compliance with requirements in the following areas:

- Salient characteristics (Sec. 5).
- Analytical requirements *when specified in the solicitation, contract, or purchase order* (Sec. 6.1). When USDA analytical testing is specified, PPB inspection personnel shall select samples and submit them to the USDA, Science and Technology Programs (S&TP) laboratory for analysis.
- Packaging requirements (Sec. 10 or as specified in the solicitation, contract, or purchase order).

## **12. REFERENCE NOTES.**

### **12.1 USDA certification contacts.**

**12.1.1 Agricultural Marketing Service.** For USDA, AMS certification, contact the **Branch Chief, Processed Products Branch (PPB), Fruit and Vegetable Programs (FVP), AMS, USDA, STOP 0247, 1400 Independence Avenue, SW, Washington, DC 20250-0247** telephone (202) 720-4693, Fax (202) 690-1527, or via E-mail: **Terry.Bane@usda.gov.**

### **12.2 Analytical testing and technical information contacts.**

**12.2.1 Agricultural Marketing Service.** For USDA, AMS technical information on analytical testing, contact the **Branch Chief, Technical Service Branch, Science and Technology Programs (S&TP), AMS, USDA, STOP 0272, 1400 Independence Avenue, SW, Washington, DC 20250-0272, telephone (202) 690-0621, or via E-mail: anita.okrend@usda.gov.**

### **12.3 Sources of documents.**

**12.3.1 Source of information for nongovernmental documents are as follows:**

Copies of the Official Methods of Analysis of the AOAC International may be obtained from: **AOAC International, 481 North Frederick Avenue, Suite 500, Gaithersburg, MD 20877, telephone (301) 924-7077. Internet address: <http://www.aoac.org>.**

**12.3.2 Sources of information for governmental documents are as follows:**

Applicable provisions of: the Fair Packaging and Labeling Act are contained in 16 CFR Parts 500 to 503, and the Federal Food, Drug, and Cosmetic Act are contained in 21 CFR Parts 1 to 199. These documents may be purchased from: **Superintendent of Documents, ATTN: New Orders, P.O. Box 371954, Pittsburgh, PA 15250-7954. Credit card (MasterCard or Visa) purchases may be made by calling the Superintendent of Documents (202) 512-1800 or on the Internet at: <http://www.gpoaccess.gov/nara/index.html>.**

Copies of this CID and the United States Standards for Condition of Food Containers are available from: **Head, Food Quality Assurance Staff, FVP, AMS, USDA, STOP 0243, 1400 Independence Ave., SW, Washington, DC 20250-0243, telephone (202) 720- 9939, Fax (202) 690-0102, via E-mail: [FQAStaff@usda.gov](mailto:FQAStaff@usda.gov) or on the Internet at: <http://www.ams.usda.gov/fv/fvqual.htm>.**

Beneficial comments, recommendations, additions, deletions, clarifications, etc., and any data which may improve this document should be sent to: **Commander, Defense Supply Center Philadelphia, ATTN: DSCP-FTSL, 700 Robbins Avenue, Philadelphia, PA 19111-5092 or Fax (215) 737-2963, or via E-mail: [Sally.A.Gallagher@dla.mil](mailto:Sally.A.Gallagher@dla.mil).**

Military activities should submit requests for copies of this CID to: **Standardization Documents Order Desk, Document Automation And Production Service, 700 Robbins Avenue, Building 4D, Philadelphia, PA 19111-5094 or on the Internet at: <http://assist.daps.dla.mil/quicksearch/>.**

**A-A-20087C**

**MILITARY INTERESTS:**

**Custodians**

Army - GL  
Navy - SA  
Air Force - 35

**CIVIL AGENCY COORDINATING ACTIVITIES:**

DOJ - BOP  
HHS - NIH, IHS  
USDA - FV  
VA - OSS

**Review Activities**

Army - MD, QM  
Navy - MC

**PREPARING ACTIVITY:**

DLA - SS  
(Project No. 8950-P131)

**NOTE:** The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at <http://assist.daps.dla.mil>.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or part of an individual's income is derived from any public assistance program (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotope, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410, or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.